

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
12 May 2005 (12.05.2005)

PCT

(10) International Publication Number
WO 2005/043155 A1

(51) International Patent Classification⁷: **G01N 33/48**,
A61K 39/00, 39/395, 39/38, C12N 5/02, 5/00, 5/08, A01N
65/00, 63/00

(74) Agents: LEVY, Seth, D. et al.; Davis Wright Tremaine
LLP, 865 Figueroa Street, Suite 2400, Los Angeles, CA
90017-2566 (US).

(21) International Application Number:
PCT/US2004/034761

(81) Designated States (*unless otherwise indicated, for every
kind of national protection available*): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(22) International Filing Date: 20 October 2004 (20.10.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/513,040 21 October 2003 (21.10.2003) US

(84) Designated States (*unless otherwise indicated, for every
kind of regional protection available*): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

(71) Applicant (*for all designated States except US*):
CEDARS-SINAI MEDICAL CENTER [US/US];
8700 Beverly Boulevard, Los Angeles, CA 90048-1865
(US).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **WHEELER,**
Christopher [US/US]; 471 Havenside Avenue, Newbury
Park, CA 91320 (US). **DAS, Asha** [MY/US]; 360 South
Burnside Avenue, #33-7A, Los Angeles, CA 90036 (US).
BLACK, Keith [US/US]; 1233 Roberto Lane, Los Ange-
les, CA 90077 (US).

Published:

— with international search report

*For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.*

(54) Title: SYSTEM AND METHOD FOR THE TREATMENT OF CANCER, INCLUDING CANCERS OF THE CENTRAL
NERVOUS SYSTEM

(57) Abstract: The invention relates to the treatment of cancer, and particularly to the treatment of cancers of the central nervous system, such as glioblastoma multiforme. A dual therapeutic approach is provided, including the administration of a dendritic cell-based cancer vaccine and a regimen of chemotherapy. The two therapies may be administered concurrently with one another and/or with an initial vaccination preceding chemotherapy. In various embodiments, the dendritic cell-based cancer vaccine includes either primed or unprimed dendritic cells; for instance, the dendritic cells may be autologous tumor antigen-presented dendritic cells. The dual therapeutic approach of the instant invention beneficially influences the chemosensitivity of a mammal with cancer.

WO 2005/043155 A1